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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,611	03/15/2004	Moshe Finarov	1811.70105	1803
7590 08/05/2005 Lawrence J. Crain Suite 2500 300 South Wacker Drive Chicago, IL 60606			EXAMINER ROSE, ROBERT A	
			ART UNIT 3723	PAPER NUMBER

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,611

Applicant(s)

FINAROV, MOSHE

Examiner

Robert Rose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-46 is/are pending in the application.
- 4a) Of the above claim(s) 32,33,41,42 and 45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-31,34-40,43,44 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-25 have been canceled.
2. Applicant's election without traverse of Group II in the reply filed on May 23, 2005 is acknowledged.
3. Claims 32-33, 41-42, and 45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 23, 2005.
4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 37-40, 43-44, and 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 37, lines 11-12 the phrase "the end-point signal" is without proper antecedent support. In claim 46, line 1 the phrase "comprising a processing..." is deemed non-grammatical in that the recited "processing" is not a structural element of the "material removal tool arrangement", but rather a method. Applicant should recite "means for processing a stream of articles" if applicant intends to claim a processing means in combination with an endpoint detector as elements of the material removal tool arrangement. In claim 46, lines 8-9 the recitation "the material deposition" is without antecedent basis, and is inconsistent with the preamble, which recites a material removal tool.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 26-27, 29-31, 34-37, 39, 43-44, and 46 are rejected under 35

U.S.C. 102(b) as being clearly anticipated by Li et al('492). Li et al disclose a method and apparatus for processing of wafers comprising all of the subject matter set forth in applicant's claims above. The wafer is processed by a cmp machine or etching machine(column 7, lines 8-13) and the thickness of a layer is monitored during the processing under control of an endpoint signal. Li et al disclose a sampling technique for processing wafers in which the total processing time is determined by adding an overprocessing time to the reference point processing time to arrive at the total processing time necessary to establish the endpoint. After processing, the thickness of the layer is measured and the difference between the desired thickness and actual thickness is used to adjust the endpoint signal for the next wafer to be processed. The ratio of the difference between the desired thickness and actual thickness is used to determine an adjusted time period for processing to achieve the desired thickness, and the value of the endpoint signal corresponding to the changed processing time is used to correct the endpoint signal for the next wafer.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

9. Claims 28, 38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al('492) in view of Moriyama et al. Moriyama et al disclose a method of endpoint detection for wafer processing which utilizes optical sensors to measure the residual thickness of a thin film layer. To employ optical means for measuring the residual thickness in the method and apparatus of Li et al('492) to arrive at the endpoint signal would have been obvious in view of Moriyama et al.

10. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (571) 272-4494.

Robert Rose
Primary Examiner
Art Unit 3723



Rr

August 3, 2005.